THE OWNERD SHARKS OF AMERICA

TO ALL TO WHOM THESE PRESERTS SHALL COME:

ALL International Seeds and Rutgers,

the State Unibersity of Aeb Jersey

DICCUS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT. THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS. A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW: THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY TEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC CENSISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR UNG IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE REPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, CHEWINGS

'LaCrosse'

In Testimone Thereof, I have hereunto set my hand and caused the seal of the Hint Unriety Protection Office to be affixed at the City of Washington, D.C. this seventh day of April, in the year two thousand and eight.

Altest:

Commissioner

Plant Variety Protection Office Agricultural Marketing Service

Colmone T. Shop

#200800080

(See reverse for instructions and information collection burden statement)

GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filing fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice). NEW: With the application for a seed reproduced variety or by direct deposit soon after filing, the applicant must provide at least 3,000 viable untreated seeds of the variety per se, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

General E-mail: PVPOmail@usda.gov

Homepage: http://www.ams.usda.gov/science/pvpo/PVPindex.htm

SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and **provide evidence** that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870. http://www.ams.usda.gov/lsg/seed.htm.

ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

August 30, 2007

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, parental status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

EXHIBIT A

Origin and Breeding History of LaCrosse Chewings Fescue

LaCrosse chewings fescue (Festuca rubra commutata) is an advanced generation cultivar selected from the maternal progenies of 13 plants. LaCrosse was developed for improved turf performance and freedom from disease. 10 of the families used for breeding LaCrosse chewings fescue were developed using a germplasm and population improvement program initiated at Rutgers University. The other three families trace to selections out of the variety Longfellow II.

Although chewings fescue originated in Europe and performs best in cool-summer climates typical of northwestern Europe and the British Isles, millions of kilograms of seed have been used in turfgrass mixtures throughout the eastern United States. The performance of common types of chewings fescue has been reasonably good on moderately fertile, moderately acid, well drained soils in the cool-summer parts of New England and upstate New York, especially under conditions where light shade with adequate air circulation produce a cooling effect. In warmer regions, only a few elite plants have survived in old turfs. Many of these rare, outstanding plants have persisted and spread to produce attractive patches of turf often exceeding one meter in diameter. The origin of these plants is unknown. However, selected plants appeared to be many decades old.

An intensive germplasm collection effort was initiated by Rutgers University in 1962 to select and utilize the best plants surviving in old turfs. The most promising plants used in this program were selected from old lawn-type turfs on the grounds of Fort Mc Henry, Baltimore, MD, Johnson Park in Piscataway, NJ, the College Avenue Campus of Rutgers University, New Brunswick, NJ, the Bridgehampton Golf Course, Bridgehampton, NY, Longfellow Park in Cambridge, MA, Westview Cemetery in Atlanta, GA, old parks in Philadelphia, PA, Tennant Cemetery, in Tennant, NJ, and a lawn located at 4 Delaware Drive in East Brunswick, NJ. Promising plants selected from old turfs were subjected to clonal and progeny evaluation in closely mowed turf trials and spaced-plant nurseries. Of several hundred chewings fescue plants collected, only a few dozen were saved for further breeding work. These elite selections were crossed with other promising selections from the germplasm collection program or from current cycles of the breeding program. Progenies from these crosses were included in population improvement programs, which included screening in a greenhouse for improved disease resistance, in spaced-plant nurseries for increased seed yield and uniformity, and in closely mowed turf trials for improved turf performance and increased stress tolerance. Extensive screening for improved disease resistance was conducted under greenhouse conditions as well as in spaced-plant nurseries and closely mowed turf trials at North Brunswick, and Adelphia, NJ.

In the spring of 1999 25 plants were selected out of the variety Longfellow II at DLF International Seeds Research Station near Tangent, Oregon. Selection criteria included dense vegetative tillering and resistance to leaf spot. The selected plants were crossed in isolation and following seed ripening were harvested individually. In the late summer of 1999 progenies from the 17 plants with the highest seed yield were seeded in individual plots in a turf trial near Adelphia, New Jersey. Also sown in this trial were several hundred progenies of clones selected from the Rutgers turfgrass breeding program.

Following two years of evaluation for disease resistance, heat and drought stress tolerance and improved turf quality 15 single-plot progenies were selected from this trial. Selection was based on turf performance prior to selection and appearance of the plots at the time of selection. Of the 15 progeny twelve were descended from the Rutgers breeding program and three were derivatives of Longfellow II. After intense interplant competition eliminated most of the weak plants during those two years of evaluation, promising plants were selected from those 15 single-plot progeny turf plots and sent to DLF International Seeds for increase and further nursery evaluation in the late summer of 2002. These plants were used to establish a spaced plant nursery near Junction City, Oregon. This nursery consisted of three replications of 60 plants from each progeny family for a total of 2700 plants.

Prior to anthesis in 2003 two of the Rutgers families were completely removed because of poor seed yield potential. In the remaining thirteen families approximately 25% of the plants were removed. Plants that were rogued had on or more of the following traits: coarse leaves, lighter green color, high susceptibility to leaf sport, or late maturity. The plants that remained in the nursery were allowed to interpollinate and after seed ripening they bulk harvested. This seed was the first breeder seed of the variety. Breeder seed of LaCrosse is maintained by DLF International Seeds, Halsey, Oregon.

The variety LaCrosse has appeared uniform and stable during multiplication from breeder generation to foundation generation and from breeder to certified generation during the years 2003-2006. LaCrosse has a small percentage (<0.1%) of plants that are somewhat taller and coarser than the rest of the population. The percentage of these plants appears to be uniform and stable when seed is multiplied from breeder to foundation to certified generation.

Statement of Distinctness

LaCrosse chewings fescue (Festuca rubra commutata) is a cool-season bunch grass developed for use in turf.

LaCrosse is most similar to the variety Koket. LaCrosse differs from this variety in characteristics including, but not necessarily limited to the following:

- 1) LaCrosse has a significantly later heading date than Koket when grown in western Oregon (May 9 vs. May 4; see Table 1, Exhibit D).
- 2) LaCrosse has a shorter leaf sheath length than Koket when grown in western Oregon (12.5 cm vs. 15.2 cm; see Table 2, Exhibit D).

REPRODUCE LOCALLY. Include form number and date on all reproductions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY

IAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DE		ARIETY NAME
DLF International Secos and Rutgers, the State University of New Jers	IS-FRC 17		Lacrosse
DDRESS (Street and No. or RD No., City, State, Zip Code and Col	untry)		HOLEGNOUSFOREN E BEZER BEREITER
PO Box 229/175 West H Street Halsey, OR 97348		PV	PO NUMBER
USA			#200800080
LEASE READ ALL INSTRUCTIONS CAREFULLY			
lace the appropriate number that describes the varie 0 8 9 or 0 9). Characteristics described in hould be for SPACE PLANTS. Royal Horticultural Start green Scale escribe location of test area, conditions and number	ncluding numerical measurement ociety or any recognized color far	s, should represent those to may be used to determine	hat are typical for the variety. Measured die plant colors; designate system used:
SPECIES: (With comparison varieties for use belo	w – use varieties within species	of application variety)	
1 = F. rubra spp. commutata (Chewing	s) 11 = Cascade 14 = Banner	12 = Highlight 15 = Barfalla	13 = Jamestown
2 = F. rubra spp. litoralis (Creeping Re	d) 21 = Dawson	22 = Starlight	23 = Merlin
3 = F. rubra spp. rubra (Spreading Red		32 = Ruby	33 = Fortress
4 = F. ovina (Sheep)	34 = Ensylva 41 = Covar	•	
5 = F. longfolia (Hard)	51 = Durar	52 = Biljart (C-26)	53 = Scaldis
6 = F. tenuifolia (Fine-Leaved Sheep)	61 = Panda	62 = Barok	•
7 = Other (Specify) F			
OVERALORY			•
CYTOLOGY: 42 Chromosome Number 3 Plo	oldy 1 = diploid 2 = te	etraploid 3 = hexaplo	oid 4 = octoploid
ADAPTATION: (0 = Not Tested, 1 = Not Adapted,			
	North Central 人 Pacifi	c Northwest	Other (Specify)
Northeast D Southeast 2	North Central [2] Pach		
	<u></u>	estern orego	on
MATURITY: Date First Headed (Panicle Emergent Maturity Class:	ce) Location(s) of Trail(s) W	estern Orego	

(voice and TDD).

4. MATURITY: (continued)		
O 8 Days earlier than	13	#200800080
Maturity Same as	Comparison Variety	
05 Days later than KoKct		
5. PLANT HEIGHT: (At Maturity; to Top of P	anicle; Average of 10 Tallest Culms)	
689 mm Height		
073 mm shorter than	1 3)	
Height the same as Koket	Comparison Variety	
mm taller than		
6. GROWTH HABIT: (Mature)		
1 = Erect (Ruby)	2 = Semi-erect (Highlight)	3 = Prostrate (Silvana)
7. RHIZOMES:		
mm Length	mm Width mm	n Internode Length
1 = Absent (Highlight) 4 = Very Strongly Creeping (F	2 = Weakly Creeping (Dawson) Fortress)	3 = Strongly Creeping (Boreal)
8. LEAF BLADE:		
Color: 1 = Light Green (State	mestown, Manoir) 5 = Bluegreen (Sa	Green (Highlight) 3 = Medium Dark Green (Ruby, Agram) phir) 6 = Graygreen (Scaldis)
	1 = Absent (Koket) 2 = Present (Vendome)
Anthocyanin: 1 = Absent	2 = Present	Hairs (Basal): 1 = Absent 2 = Present
Margins: 1 = Smooth	2 = Semi-rough 3 = Rough	
Anthocyanin: 1 = Absent Margins: 1 = Smooth Margin folding (closure): Width class: 1 = N	1 = Rolled inward (closed-Highlight)	2 = Flat (open-Jamestown, Engina)
********************************	Very Fine (Agram, Frida) Medium Fine (Fortress, Ruby Scaldis)	2 = Fine (Jamestown, Highlight, Banner, Dawson) 4 = Medium Coarse (Engina)
0 6 5 mm Length (flag leaf)		
mm Shorter than	13	
Blade length same as	Comparison Variety	
mm Longer than		
2.30 mm Width (flag leaf)		
mm Narrower than		
Blade width same as	Comparison Variety	
mm Wider than		
9. LEAF SHEATH:		
Anthocyanin (seedling):	1 = Absent (Highlight) 2 = Pres	ent (Jamestown, Fortress, Marga)
Auricle Hairniess:	1 = Absent 2 = Pres	ent
Margins:	1 = Open (Highlight) 2 = Close	ed (Jamestown)

10. PANICLE	E: (Mature plant)	·			#2008	000	80	
2	Shape:	1 = Narrow-tapering	2 = Ovate	3 = Oblong	4 = Other (Specify)			
. 1	Туре:	1 = Open	2 = Intermedate	3 = Compact				
길	Orientation:	1 = Erect	2 = Nodding					
	Branch Pubescence:	1 = Glabrous	2 = Pubescent					
<u>4</u>	Anther Color:	∫ 1 = Yellowish Green	2 = Green	3 = Bluish Green	4 = Purplish			
4	Glume Color (At 50% flowering)	5 = Reddish	6 = Other (Specify)		4 - 1 diplion			
1115	-n'			•				
18	mm Shorter than Sh	adow []						
	Panicle length same		Comparison Variety					
	mm Longer than							
			_			· · · · · · · · · · · · · · · · · · ·		,
11. PALEA:								
3	Hairs (On keels or marg	jins): 1 = 3 =	Absent (Banner) Long (Ranier, Fortress	2 = Short (Agrar , Jamestown)	n, Scaldis, Olds)			
12, LEMMA:	,	4 1 1 1 1 1 1 1 1 1			7 - Manu (Highlight)			
	Hairs:	1 = Absent (Jamestown) 2 = Se	veral	3 = Many (Highlight)			
	mm Lemma Length mm Shorter than							
	Lemma length same as		Comparison Variety					* * *
	mm Longer than		Companson variety					
				•				
	mm Lemma Width							
	mm Narrower than							
	Lemma width same	e as	Comparison Variety					
2	mm Wider than							
	Awns: 1 =	Absent 2 =	Present					
. [mm Awn Length							
	mm Shorter than							
	Awn length same as		Comparison Variety					
	mm Longer than							
13. SEED: (W	ith lemma & palea)							
<u></u>	Size Class (g/1000	seed):	0-0-444					
	1 = < .9 g (Biljart, D 3 = 1.1 – 1.3 g (For	rawson) tress, Novorubra)	2 = .9 - < 1.1 g (Jame 4 = > 1.3 g (Boreal, G	stown, Highlight) olfrood)				
	mm per 1000	seed	_					
	mg per 1000 s	seed less than						
· []]]	Seed Weight s	same as	Comparisor	Variety				
	mg per 1000 s	eed more than						

4.	DISEAS	SE INSECT, AND NEMATODE REACTION: (0 = Not Tested, 1 = Susc	eptible,	#200800080
	2	Melting-out (Drechslera poae) (Helminthosporium vagans)	0	Stripe Rust (P. striiformis)
	2	Leaf Spot (D. siccans)	0	Leaf Rust (P. poae-nemoralis)
	O	Net Blotch (D. dictyoides)	0	P. crandallii
	2	Leaf Spot (Bipolaris sorokiniana)		Pythium Blight (Pythium ultimum)
		Brown Patch (Rhizoctonia solani)	2	Red Thread (Corticuim fusciforme)
	0	Powdery Mildew (Erysiphe graminis)	2	Dollar Spot (Sclerotinia homeocarpa)
	0	Stripe Smut (Ustilago striiformis)		Insect
	0	F. Patch, Pink Snow-mold (Fusarium nivale)		Nematode
•	O	Fusarium blight (F. tricinctum, F. roseum)		Other
	0	Gray snow mold (<i>Typhula iotana</i>)		Other
	0	Stem rust (Puccinia graminis)		Other

15. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE SUBITTED VARIETY: For the following characteristics indicate the Degree of Resemblance by placing the column marked D.R. with one of the following numbers:

1 = Application variety is less than comparison variety

2 = Same as

3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	, D.R.
Rhizome Length	NIA		Growth Habit	Koket	1-less creet
Leaf Width	Koket	2	Leaf Color	Koket	3
Panicle Color	koket	2	Panicle Shape	KoKet	2
Winter Color	Longtellow II	2	Cold Injury		
Shade Tolerance	Longfellow II	2	Heat		
Drought	LongfellowII	2	Disease*		

^{*} Specify each disease evaluated.

16. ADDITIONAL DESCRIPTION: (Use additional sheets as required).

Describe all characteristics that cannot be adequately described in the form above in Exhibit D. Varieties used for comparison should be used as may be appropriate, such as for disease reactions. Append all comparative trial and evaluation data, including measured characters, environmental, and disease tests results. Providing such information may aid in conducting a more thorough review of the applicants claims of distinctness.

EXHIBIT D.

Table 1. Heading dates (as day of year) of chewings fescue varieties grown near Philomath, Oregon in 2005 and 2006. The Philomath test was grown on Willamette silt loam . with a pH of 6.2. The trial consisted of three replications of each variety with 20 plants per replication. The trials was conducted using a randomized complete bloc design. Plant spacings were 1.5 feet within rows and 3 feet between rows.

NAME	2005	2006	Average	
Koket	132.8	118.9	125.9	May 4
Shadow	133.9	124.6	129.2	May 7
Longfellow II	135.8	121.7	128.7	May 7
LaCrosse	136.4	125.7	131.1	May 9
Banner	137.5	129.8	133.7	May 12
Jamestown	145.6	132,3	138.9	May 17
LSD @ 0.05	2.4	1.2	1.5	

EXHIBIT D

Table 2. Morphological characteristics of chewings fescue varieties grown near Philomath, Oregon The trials was conducted using a randomized complete bloc design. Plant spacings were 1.5 feet in 2005 and 2006. The Philomath test was grown on Willamette silt loam. with a pH of 6.2. The trial consisted of three replications of each variety with 20 plants per replication. within rows and 3 feet between rows.

	Plant leight (cm)			Flag Leaf Height (cm)		_	Flag Leaf Length (cm	-	>	Flag Leaf Vidth (mm	_
2005	2006	Average	2005	2006	Average	2005	2006	Average	2005	2006	
60.5	77.3	68.9	16.8	24.6	20.7	5.4	7.6	6.5	2.6	2.0	
68.4	84.1	76.2	24.3	35.3	29.8	6.7	9.6	8.1	2.4	1.9	
68.9	79.1	74.0	19.7	29.3	24.5	7.3	8.7	8.0	2.3	1.9	
70.3	86.0	78.1	21.4	31.3	26.4	6.1	9.6	7.9	2.6	2.0	
70.3	82.9	9.9/	27.0	36.0	31.5	8.3	9.0	8.7	2.6	1.7	
6.07	81.5	76.2	25.9	30.4	28.1	7.4	10.7	9.1	2.6	2.3	
3.4	3.9	3.3	6.3	5.6	3.9	1.2	1 .3	1.0	NS	0.2	
_	10 J. c.			-			· - j				
<u> </u>	ear Sheam			Iller Lear			I Iller Leat			Panicle	
	ength (cm)			Length (cm,			Nidth (mm		_	ength (cr	
2005	2006	Average	2005	2006	Average	2002	2006	Average	2005	2006	
11.2	13.9	12.5	5.3	6.7	0.9	2.3	2.1	2.2	11.0	12.1	
15.0	18.7	16.8	6.3	8.5	7.4	2.2	1.7	1.9	12.0	13.5	
13.4	17.1	15.2	6.2	8.3	7.2	2.0	<u>6.</u>	2.0	12.8	12.8	
13.5	17.1	15.3	5.9	9.0 0.0	7.4	2.5	1 .8	2.2	11.4	13.9	
15.2	18.3	16.7	7.3	8.8	8.1	2.4	7.5	1.9	12.2	12.8	
14.9	17.5	16.2	6.9	9.7	8.3	2.4	2.4	2.4	13.3	13.4	
!				1							
1.7	- -	-	0.7	0.7	0.5	0.2	0.2	0.2	4.	1.2	
	, ,	, , , ,	Plant (cm) 2006 Av 2006 Av 77.3 6 84.1 79.1 86.0 82.9 81.5 3.9 2006 Av 2006 Av 13.9 17.1 17.1 17.1 17.1 17.5	Plant Height (cm) 2006 Average 2005 77.3 68.9 16.8 84.1 76.2 24.3 79.1 74.0 19.7 86.0 78.1 21.4 82.9 76.6 27.0 81.5 76.2 25.9 3.9 3.3 6.3 Leaf Sheath Length (cm) 2006 Average 2005 13.9 12.5 5.3 18.7 16.8 6.3 17.1 15.3 5.9 18.3 16.7 7.3 11.1 1.1 0.7	Plant Height (cm) 2006 Average 2005 77.3 68.9 16.8 84.1 76.2 24.3 79.1 74.0 19.7 86.0 78.1 21.4 82.9 76.6 27.0 81.5 76.2 25.9 3.9 3.3 6.3 Leaf Sheath Length (cm) 2006 Average 2005 13.9 12.5 5.3 18.7 16.8 6.3 17.1 15.3 5.9 18.3 16.7 7.3 11.1 1.1 0.7	Plant Height (cm) Flag Leaf 77.3 68.9 16.8 24.6 77.3 68.9 16.8 24.6 84.1 76.2 24.3 35.3 84.1 76.2 24.3 35.3 84.1 76.2 24.3 35.3 86.0 78.1 21.4 31.3 82.9 76.6 27.0 36.0 81.5 76.2 25.9 30.4 3.9 3.3 6.3 2.6 Leaf Sheath Tiller Leaf Length (cm) 2006 Average 2005 2006 13.9 12.5 5.3 6.7 13.9 12.5 5.3 6.7 17.1 15.3 5.9 8.9 17.1 15.3 5.9 8.9 17.5 16.2 6.9 9.7 17.5 16.2 6.9 9.7 17.1 1.1 0.7 0.7	Flag Leaf Height (cm) Height (cm) 2006 Average 2005 2006 Average 2005 77.3 68.9 16.8 24.6 20.7 5.4 84.1 76.2 24.3 35.3 29.8 6.7 5.4 84.1 76.2 24.3 35.3 29.8 6.7 5.4 84.1 76.2 24.3 35.3 24.5 7.3 86.0 78.1 21.4 31.3 26.4 6.1 82.9 76.2 25.9 30.4 28.1 7.4 81.5 76.2 25.9 30.4 28.1 7.2 15.9 3.3 6.3 6.0 2.3 1.2 Length (cm) Length (cm) Length (cm) Length (cm) 206 Average 2005 206 Average 2005 13.9 12.5 5.3 6.7 6.0 2.3 1.2 13.7 16.8 6.3 8.5 7.4 2.5 17.1 15.3 6.9 8.9<	Flag Leaf Height (cm) Height (cm) 2006 Average 2005 2006 Average 2005 77.3 68.9 16.8 24.6 20.7 5.4 84.1 76.2 24.3 35.3 29.8 6.7 5.4 84.1 76.2 24.3 35.3 29.8 6.7 5.4 84.1 76.2 24.3 35.3 24.5 7.3 86.0 78.1 21.4 31.3 26.4 6.1 82.9 76.2 25.9 30.4 28.1 7.4 81.5 76.2 25.9 30.4 28.1 7.2 15.9 3.3 6.3 6.0 2.3 1.2 Length (cm) Length (cm) Length (cm) Length (cm) 206 Average 2005 206 Average 2005 13.9 12.5 5.3 6.7 6.0 2.3 1.2 13.7 16.8 6.3 8.5 7.4 2.5 17.1 15.3 6.9 8.9<	Plant Flag Leaf Con6 Average 2005 Average 2006 Average 2006 Average 2006 Average 2006 Average 2006 Average 2006 Average 2007 35.3 29.8 6.7 9.6 7.6 9.6 7.6 9.6 7.6 9.6 7.3 8.7 9.6 8.7 9.6 8.7 9.6 8.7 9.6 8.7 9.6 8.7 9.6<	Height (cm.) 2006 Average 2005 2006 Average 2005 2006 Average 2005 77.3 68.9 16.8 24.6 20.7 5.4 7.6 6.5 2.6 84.1 76.2 24.3 35.3 29.8 6.7 9.6 8.1 2.4 79.1 74.0 19.7 29.3 24.5 7.3 8.7 8.0 2.3 86.0 78.1 21.4 31.3 26.4 6.1 9.6 7.9 2.6 82.9 76.6 27.0 36.0 31.5 8.3 9.0 8.7 2.6 81.5 76.2 25.9 30.4 28.1 7.4 10.7 9.1 2.6 3.9 3.3 6.3 2.6 3.9 1.2 1.3 1.0 Night (mm) 2006 Average 2005 2006 Average 2005 2006 Average 2005 17.1 15.2 6.2 8.3 7.2 2.0 1.9 12.0 17.1 15.2 6.2 8.3 7.2 2.0 1.9 12.0 17.1 15.3 6.9 8.9 7.4 2.5 1.8 2.1 2.1 1.4 18.3 16.7 7.3 8.8 8.1 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 2.4 1.5 1.9 12.5 11.4 18.3 16.7 7.3 8.8 8.1 2.4 2.4 2.4 13.3 1.4 11.5 11.5 11.5 11.5 11.5 11.5 11.5	Plant Height (cm) Flag Leaf Height (cm) Flag Leaf Leaf Height (cm) Flag Leaf Height (cm) Plant Length (cm) Length (cm) Length (cm) Length (cm) Length (cm) Vidth (cm) Vidth (cm) Plant (

EXHIBIT D

Table 3. Seed characteristics of chewings fescue varieties grown near Philomath, Oregon in 2005 and 2006. The Philomath test was grown on Willamette silt loam . with a pH of 6.2. The trial consisted of three replications of each variety with 20 plants per replication. The trials was conducted using a randomized complete bloc design. Plant spacings were 1.5 feet within rows and 3 feet between rows.

		Seed			Seed			Awn	
	L	.ength (m	m)	7	Width (mr	n) .	L	.ength (m:	m)
NAME	2005	2006	Average	2005	2006	Average	2005	2006	Average
LaCrosse	4.8	5.2	5.0	0.9	1.0	0.9	1.7	1.8	1.7
Longfellow II	5.1	5.7	5.4	1.0	1.0	1.0	1.9	2.0	2.0
Koket	5.9	6.5	6.2	0.9	1.0	0.9	2.1	2.3	2.2
LSD @ 0.05	0.4	0.5	0.4	NS	NS	NS	NS	NS	NS

GENETIC COLOR RATINGS OF FINELEAF FESCUE CULTIVARS 1/ 2004 DATA

~
2
GREEN
9=DARK
RATINGS 1-9;
COLOR
GENETIC

		-						}				ī								
NAME	IA1	IL1	IL2	IN1	₹	MA1	ME1	MN.	PD	WE1	L CA	NU2	PA1	0E1	SD1	UT.1	VA1	WA3	WI1	MEAN
DLF-RCM	7.3	5.0	5.0	6.3	6.3	5.7	7.0	5.0	7.7	7.0	5.0	3.7				5.3	6.7	6.	7.0	υ. σ
CASCADE	7.7	4.7	7.0	6.0	6.3	6.3	6.7	5.0	6.0	8.0	3.0	4.3	5.0	6.7		3.7	0.9	4.0	6.7	5.7
SRX 55R	8.0	5.3	2.7	5.0	7.7	6.0	5.3	3.3	7.3	4.0	5.0	4.3				5.7	6.7	5	7.0	5.6
DP 77-9886	7.3	5.0	5,3	0.9	7.0	5.7	6.3	5.0	6.3	7.0	4.3	6.3				5.3	0.9	φ 6	2.3	5.6
SEABREEZE	7.0	6.0	3.7	4.3	6.3	5.7	7.0	4.0	6:3	5.7	3.3	4.0				4.7	5.3	5.7	6.7	5,5
SHADEMASTER	7.0	5.0	4.3	4.0	5.7	6.0	6.7	4.0	7.7	6.3	2.3	5.0				5.7	5.3	4.0	7.3	5.4
DAWSON E	7.0	5.3	2.3	3.7	5.7	5.7	5.7	3.3	5.7	8.0	3.0	3.3				5.0	0.9	5.0	6.0	5.1
ORACLE	6.7	4.7		5.3	6.7	5.0	5.0	3.3	7.3	7.0	2.7	4.0				6.4	5.7	4.0	6.3	4
BOREAL	7.0	4.3	.	5.0	6.3	5.7	4.7	3.0	7.0	6:7	3.0	3,3			4.3	3.3	0.9	4.0	5.7	4.8
LSD VALUE	0.7		2.0	1.4	÷.3	1.0	1,5	1.7	4.	-	2.4	4.1						1,5	1.0	0.3
C.V. (%)	6.1			12.9	11.2	10.0	13.4	19.3	12.4	9.4	27.4	16.7	10.2	6.5	9,1	18.5	10.2	19.2	9.0	13.6

GENETIC COLOR RATINGS OF CHEWINGS FESCUE CULTIVARS 1/ 2004 DATA

TABLE 8B.

		2
		GREEN
		9=DARK
ζ		-6
1004	 	RATINGS 1
		GENETIC COLOR

174) 7.7 6.7 8.0 8.0 6.0 7.7 7.0 8.3 5.3 9.0 8.0 8.3 7.3 8.0 7.0 8.0 6.7 8.7 7.7 7.7 6.0 7.7 6.0 8.3 5.3 7.7 7.7 8.3 7.3 8.0 7.0 6.0 8.3 7.7 6.0 5.7 7.0 8.7 7.3 8.0 7.3 8.0 7.3 7.7 6.0 7.7 7.0 8.3 6.3 7.7 7.0 6.3 7.7 5.7 7.7 8.0 7.3 6.3 7.7 7.3 8.0 5.3 7.0 6.7 6.7 6.7 6.3 6.3 8.0 5.3 7.0 6.7 6.7 6.7 6.3 6.7 7.3 5.7 7.3 8.3 6.0 6.7 6.7 6.3 6.7 7.3 5.0 5.3 6.0 7.0 6.3 6.7 5.0 7.3		-	777	- 2	-	_ {	ME L	LNW	5	NE J	2	NU2	PA1	QE 1	SD1	H1	VA1	WA3	WI	MEAN
8.3 5.3 9.0 8.0 8.3 7.3 8.0 7.0 7.7 7.0 4.3 4.7 7.0 8.0 7.3 6.7 8.0 7.3 6.0 6.3 7.3 7.3 6.3 6.3 7.3 6.0 6.3 7.3 7.0 5.3 6.3 7.3 6.0 6.3 7.3 6.0 6.3 7.3 6.0 6.3 7.3 6.0 6.3 7.3 6.0 6.0 7.7 7.3 6.0 6.0 7.7 7.3 6.0 6.0 7.7 7.3 6.0 6.0 6.0 7.7 7.0 6.0 7.7 7.0 6.0 6.0 7.7 7.0 6.0 <td>174) 7.7</td> <td>6.7</td> <td>8.0</td> <td>8.0</td> <td>0.8</td> <td>0.0</td> <td>7.7</td> <td>7.0</td> <td>7.3</td> <td>7.7</td> <td>7.0</td> <td>6.3</td> <td>7.3</td> <td>8.0</td> <td>7.3</td> <td>6.0</td> <td>8.3</td> <td>4.3</td> <td></td> <td>7.2</td>	174) 7.7	6.7	8.0	8.0	0.8	0.0	7.7	7.0	7.3	7.7	7.0	6.3	7.3	8.0	7.3	6.0	8.3	4.3		7.2
B.0 6.7 8.7 7.3 7.7 6.0 6.3 7.3 7.7 5.3 6.3 7.3 6.3 6.3 7.3 6.3 7.7 7.3 6.3 7.7 7.7 6.3 7.7 7.3 6.3 7.7 7.3 6.0 7.3 7.7 7.3 6.0 7.3 6.0 7.3 6.0 7.3 6.0 7.3 6.0 7.3 6.0 7.3 6.0 7.3 6.0 6.0 7.3 6.0 6.0 7.3 6.0 <td>_</td> <td></td> <td>9.0</td> <td>8.0</td> <td>8.3</td> <td>7.3</td> <td>8.0</td> <td>7.0</td> <td>7.7</td> <td>7.0</td> <td>4.3</td> <td>4 7</td> <td>7.0</td> <td>8.0</td> <td>7.3</td> <td>6.7</td> <td>8.0</td> <td>4.7</td> <td></td> <td>7.1</td>	_		9.0	8.0	8.3	7.3	8.0	7.0	7.7	7.0	4.3	4 7	7.0	8.0	7.3	6.7	8.0	4.7		7.1
8.3 5.3 7.7 7.7 8.3 7.3 8.3 7.3 7.3 7.7 4.7 5.3 7.7 7.7 5.3 6.0 6.0 7.3 5.7 6.0 7.3 5.0 7.7 7.7 7.3 6.0 6.0 5.3 6.7 7.3 6.0 6.0 7.3 5.0 7.7 7.7 6.0 6.0 5.3 7.0 6.0 5.3 7.0 6.0 5.3 7.0 6.0 5.3 7.0 6.0 7.3 5.0 7.7 7.7 6.0 7.7 7.0 8.3 6.3 7.7 7.0 6.3 6.0 6.0 7.7 5.0 6.0 5.3 7.0 6.0 5.3 7.0 6.0 7.3 6.0 7.3 7.0 7.3 8.0 7.7 7.0 6.3 6.0 6.0 7.7 5.0 5.0 7.3 4.0 7.7 7.7 6.0 7.7 6.0 7.7 6.0 7.7 6.0 7.7 6.0 7.7 6.0 7.7 6.0 6.0 6.7 7.3 6.0 6.0 7.7 6.0 6.0 6.7 7.3 6.0 6.0 7.7 7.0 6.3 6.0 6.7 7.3 6.0 6.0 7.2 7.3 6.0 6.0 6.2 7.3 6.0 6.0 6.7 7.3 6.0 6.0 6.2 6.0 6.2 7.3 6.0 6.0 6.2 6.0 7.2 7.3 6.0 6.0 6.2 6.0 6.2 6.0 6.2 6.0 6.2 6.0 6.2 6.0 6.2 6.0 7.2 7.3 6.0 6.0 6.2 6.0 6.0 6.2 6.0 6.0 6.2 6.0 6.0 6.2 6.0 6.0 6.2 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	8.0	2.9	8.7	7.3	7.7	7.0	7.7	0.9	6.3	7.3	7.0	5.3	6.3	7.3	6.3	6.3	7.0	5.7		6.9
7.7 6.0 5.7 7.0 8.7 7.3 8.0 7.3 6.0 6.7 6.0 5.3 6.7 7.3 6.0 6.7 6.0 5.3 7.0 6.0 7.7 6.0 6.0 5.3 7.0 6.7 7.0 6.0 5.3 7.0 6.0 5.0 6.0 5.3 7.0 6.7 6.0 6.0 5.3 7.0 6.7 6.0 6.0 5.3 7.0 6.7 6.0 6.0 5.3 7.0 6.7 6.0 6.0 5.0 7.0 6.0 6.0 7.0 6.0 6.0 7.0 6.0 6.0 7.0 6.0 7.0 6.0 6.0 7.0 6.0 7.0 6.0 7.0 6.0 7.0 6.0 7.0 6.0 7.0 6.0 6.0 7.0 6.0 7.0 6.0 7.0 6.0 6.0 7.0 6.0 7.0 6.0 7.0 6.0 7.0 6.0 7.0 <td>8.3</td> <td>5,3</td> <td>7.7</td> <td>7.7</td> <td>8.3</td> <td>7.3</td> <td>8.3</td> <td>7.3</td> <td>7.3</td> <td>7.7</td> <td>4.7</td> <td>5.3</td> <td>7.7</td> <td>7.3</td> <td>5.7</td> <td>0.9</td> <td>7.3</td> <td>4.0</td> <td></td> <td>6.9</td>	8.3	5,3	7.7	7.7	8.3	7.3	8.3	7.3	7.3	7.7	4.7	5.3	7.7	7.3	5.7	0.9	7.3	4.0		6.9
7.7 6.3 7.0 7.3 8.0 6.7 7.0 6.3 7.3 7.7 6.0 6.0 5.3 7.0 6.0 5.3 7.0 6.0 7.7 6.0 7.7 6.0 7.7 6.0 7.7 7.0 8.3 6.3 7.7 7.3 8.0 7.7 7.0 6.3 6.0 7.7 5.0 5.0 6.0 7.7 5.0 7.3 4.0 7.7 7.7 7.0 6.3 6.0 6.7 6.3 6.0 6.7 7.3 6.7 7.3 8.3 7.7 7.0 6.3 6.3 6.0 6.7 6.3 6.0 6.7 4.3 6.7 7.1 6.0 7.0 7.0 6.0 6.3 6.0 6.7 7.3 8.3 7.0 6.0 7.3 8.3 6.0 6.7 7.3 8.3 6.0 6.0 7.3 6.7 7.3 8.3 6.0 6.7 7.3 8.3 6.0 6.7 7.3 8.3 6.0 6.7 7.3 6.7 7.3 6.7 7.3 6.7 7.3 6.7 7.3 6.0 6.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8	7.7		5.7	7.0		7.3	8.0	7.3	0.9	6.7	6.0	5.3	6.7	7.3	6.0	0.9	7.3	5.0		6.7
7.7 6.0 7.7 7.0 8.3 6.3 7.7 7.3 8.0 7.0 5.0 5.0 6.0 7.7 5.0 5.0 7.3 8.0 7.7 7.0 6.3 6.3 7.7 7.0 6.3 6.3 7.7 7.0 6.3 6.3 7.7 7.0 6.3 6.3 7.7 7.0 6.3 6.3 6.3 7.3 8.3 7.3 8.3 7.7 7.0 6.3 6.0 6.7 7.3 8.3 6.7 7.3 8.3 6.7 7.3 8.3 6.7 7.3 8.3 6.7 6.0 6.0 6.3 6.0 7.3 7.3 8.3 6.7 7.3 8.3 6.7 7.3 8.3 6.7 7.3 8.3 6.0 7.3 6.0 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3	7.7		7.0	7.3		6.7	7.0	6.3	7.3	7.7	6.0	0.9	5.3	7.0	0.9	5.3	7.0	5.7		9.9
7.7 5.7 7.7 8.0 7.3 6.7 7.0 6.3 6.3 7.7 7.0 6.3 5.3 6.7 6.3 6.0 6.7 4.3 6.7 7.0 7.0 6.0 6.0 6.7 6.0 6.7 4.3 6.7 7.7 7.0 6.0 6.0 7.0 7.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6	J-5 (JAMESTOWN 5) 7.7		7.7	7.0		6.3	7.7	7.3	8	7.0	5.0	5.0	6.0	7.7	5.0	5.0	7.3	4.0		9.9
7.7 6.0 7.0 7.7 6.7 6.7 6.7 6.3 6.3 7.3 8.3 4.7 5.0 7.0 6.0 6.3 6.0 4.3 6.7 8.7 8.0 7.0 6.0 6.3 6.7 4.0 7.7 8.0 5.3 6.3 7.0 6.0 6.3 6.7 7.3 8.0 6.0 7.3 6.0 7.3 6.7 7.3 8.0 6.0 6.3 6.7 7.3 8.0 6.0 7.3 6.7 7.3 6.0 7.3 6.7 7.3 6.7 7.3 6.0 7.3 6.7 7.3 6.0 7.3 6.0 7.3 6.7 7.3 6.0 7.3 6.0 7.3 6.0 7.3 6.0 7.0 6.0 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3	7.7		7.7	8.0		6.7	7.0	6.3	6.3	7.7	7.0	6.3	5.3	6.7	6.3	0.9	6.7	4.3	:	9.9
5.3 7.0 7.3 7.0 6.7 7.3 5.7 7.3 3.0 6.0 5.3 6.3 7.0 6.0 6.3 6.7 4.0 7.7 5.7 5.7 5.7 6.0 7.3 6.7 4.0 4.7 6.7 5.7 6.3 5.3 4.7 6.0 7.3 6.7 4.0 4.7 6.7 5.7 6.3 5.3 4.7 6.0 7.3 6.1 4.3 7.0 6.0 6.3 6.3 6.7 5.0 6.0 8.0 3.0 4.3 5.0 6.7 5.0 6.7 5.0 6.7 6.0 4.0 6.7 5.0 6.7 1.3 1.2 0.8 1.7 1.4 1.5 1.2 2.1 1.3 1.2 0.7 1.6 1.1 1.2 0.9 7.1 17.0 10.2 15.8 7.5 15.8 7.5 15.9 7.1 17.0 10.2 15.8 7.5 15.8 7.5 15.9 7.1 17.0 10.2 15.8 7.5 15.8 7.5 15.9 7.1 17.0 10.2 15.8 7.5 15.8 7.5 15.9 7.1 17.0 10.2 15.8 7.5 15.8 15.8 15.8 15.8 15.8 15.8 15.8 15	ZODIAC (BUR 4601) 7.7		7.0	7.7		6.7	6.7	6.3	6.3	7.3	8.3	4.7	5.0	7.0	0.9	6.3	0.9	4.3		6.5
5.7 5.7 7.3 8.3 6.0 6.7 5.7 6.0 7.3 6.7 4.0 4.7 6.7 5.7 6.3 5.3 4.7 6.0 4.0 4.7 6.7 5.7 6.3 5.3 4.7 6.0 4.0 4.7 7.0 6.0 6.3 6.3 6.7 5.0 6.0 8.0 3.0 4.3 5.0 6.7 5.0 3.7 6.0 4.0 6.7 5.0 5.3 6.0 1.3 1.2 0.8 1.7 1.4 1.5 1.2 2.1 1.3 1.2 0.7 1.6 1.1 1.2 0.9 1.1 1.1 1.2 0.9 15.3 15.6 10.8 9.5 7.7 14.7 13.6 13.5 10.9 22.3 16.2 12.4 5.9 7.1 17.0 10.2 15.8 7.5	8.0	5.3	7.0	7.3		6.7	7.3	5.7	7.3	3.0	6.0	5.3	6.3	7.0	6.0	6.3	6.7	4.0		6.3
4.7 7.0 6.0 6.3 6.0 8.0 3.0 4.3 5.0 6.7 5.0 6.0 8.0 3.0 4.3 4.3 5.0 6.7 5.0 6.3 7.0 4.3 4.3 4.3 6.0 5.3 5.3 6.0 4.3 5.3 5.0 5.3 6.0 6.3 7.0 6.3 7.0 7.0 4.3 4.3 4.3 6.0 5.3 6.0 4.3 5.3 1.4 1.8 1.3 1.2 0.3 1.2 2.1 1.3 1.2 0.7 1.6 1.1 1.2 0.9 15.3 16.6 10.8 9.5 7.7 14.7 13.6 13.5 10.9 22.3 16.2 12.4 5.9 7.1 17.0 10.2 15.8 7.5	7.3		5.7			0.9	6.7	5.7	6.0	7.3	6.7	4.0	4.7	6.7	5.7	6.3	5.3	4.7		#9
5.0 5.3 6.0 7.0 5.7 6.3 5.0 6.3 7.0 4.3 4.3 4.3 6.0 5.3 5.3 6.0 4.3 5.3 5.3 1.4 1.8 1.3 1.2 0.8 1.7 1.4 1.5 1.2 2.1 1.3 1.2 0.7 0.7 1.6 1.1 1.2 0.9 15.3 15.6 10.8 9.5 7.7 14.7 13.6 13.5 10.9 22.3 16.2 12.4 5.9 7.1 17.0 10.2 15.8 7.5	٠	4.7	7.0			6.3	6.7	5.0	6.0	8.0	3.0	4.3	5.0	6.7	5.0	3.7	0.9	4.0		5 7
1.4 1.8 1.3 1.2 0.8 1.7 1.4 1.5 1.2 2.1 1.3 1.2 0.7 0.7 1.6 1.1 1.2 0.9 15.3 15.6 10.8 9.5 7.7 14.7 13.6 13.5 10.9 22.3 16.2 12.4 5.9 7.1 17.0 10.2 15.8 7.5		5.0	5.3	6.0	7.0	5.7	6.3	5.0	6.3	7.0	4.3	4.3	4.3	6.0	5.3	5.3	9.0	4.3		0 مِ
15.3 15.6 10.8 9.5 7.7 14.7 13.6 13.5 10.9 22.3 16.2 12.4 5.9 7.1 17.0 10.2 15.8 7.5	6.0	1.4	1.8			8.0	1.7	1.4	.5	1.2	2.1	1.3	1,2	7.0	0.7	1.6	. .	1.2		6
		_	•		9.5	7.7	14.7	13.6	13.5	10.9	22.3	16.2	12.4	5.9	7.1	17.0	10.2	15.8		<u>ء</u> 8ء
	TOTAL CITIES COOK STATE AND THE STATE AND TH		1	1	; i		1		}	!	במה יחבמב (במה מימי)									(

^{1/} TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

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C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN. 2/

TABLE 5. LEAF TEXTURE RATINGS OF FINELEAF FESCUE CULTIVARS 1/2004 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 2/

NAME	MI1	NN LN	ND1	NY1	QE1	MEAN
IS-FRR 30	6.3	6.0	8.7	7.7	0.9	6.9
DLF-RCM	6.3	6.0	8.7	7.3	6.3	6.9
DP 77-9579	0.9	6.0	8.7	7.3	6.7	6.9
SHADEMASTER	6.0	6.5	8.3	7.0	6,7	6.9
BMXC-S02	6.3	6.0	8.7	7.0	6.3	6.9
EDGEWOOD (CO3-RCE)	6.0	6.7	8.0	7.0	6.7	6.9
AUDUBON	0.9	6.3	9.0	7.0	0.9	6.9
ORACLE	0.9	6.3	8,0	7.3	9.0	6.7
LSD VALUE	0.7	-	9.0	0.8	9.0	0.4
C.V. (%)	6.7	10.0	4.2	6.7	5.6	6.7

TABLE 10B. LEAF TEXTURE RATINGS OF CHEWINGS FESCUE CULTIVARS 1/2004 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 2/

NAME	MI1	MN	ND1	N T	QE1	MEAN
DP 77-9886	7.3	7.3	9.0	7.7	7.7	7.8
ZODIAC (BUR 4601)	7.0	7.7	9.0	7 3	8.0	7.8
CASCADE	7.0	7.7	8.3	7.7	8.0	7.7
LONGFELLOW II	7.3	6.7	8.7	8.0	8.0	7.7
7 SEAS	7 3	7.3	9.0	7.3	7.0	7.6
DP 77-9885	7.3	7.3	9.0	7.3	7.0	7.6
IS-FRC 17	7.7	6.7	9.0	7.7	7.0	7.6
PST-47Z	7.0	7.0	9.0	7.3	7.3	7.5
AMBASSADOR	7.0	7.0	0.6	7.0	7.3	7.5
COMPASS (ACF 188)	7.7	7.0	8.7	7.3	6.7	7.5
CULUMBRA II (ACF 174)	7.0	7.3	8.7	7.3	7.0	7.5
J-5 (JAMESTOWN 5)	7.3	6.7	9.0	7.3	7.0	7.5
SRX 51G	7.0	7.0	0.6	7.3	7.0	7.5
LSD VALUE	0.7	0.9	0.5	6.0	0.5	0.3
C.V. (%)	5.9	7.9	3.6	7.1	4.4	5.8

TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05). 7

C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN. 7

MEAN TURFGRASS QUALITY RATINGS OF FINELEAF FESCUE CULTIVARS GROWN UNDER SHADE AT THREE LOCATIONS 1/ 2006 DATA

TURFGRASS QUALITY RATINGS 1-9: 9=1DEAL THRE

JUNICARASS GUALLIY MAILNGS 1-9; 9=IDEAL TURF	-L SSMT	a; 9≂IDE	AL TURF	2/
NAME	IL2	NE1	UT.1	MEAN
AUDUBON	4.5	5.0	4.8	8,4
IS-FRR 23	4.1	5.0	5.1	4.7
JASPER II	3.9	5,1	4.9	4.6
DAWSON E	3.4	4.3	5.5	4.4
C03-4676	3.2	5.0	4.9	4.4
ORACLE	2.7	3.6	5.3	o. e
BOREAL	4.0	2,5	4.3	3.6
SHADEMASTER	2.2	3.5	5.1	3.6
SEABREEZE	2.1	3.6	4.7	3.4
LSD VALUE	1.4	1.7	1.1	8.0
C.V. (%)	15.3	18.9	13.1	16.0

MEAN TURFGRASS QUALITY RATINGS OF CHEWINGS FESCUE CULTIVARS GROWN UNDER SHADE AT THREE LOCATIONS 1/ 2006 DATA TABLE 7B.

7 TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

		·		
NAME	11.2	NE1	UT1	MEAN
DP 77-9885	7.0	6.5	6.1	6.5
	7.4	6.3	5.6	6.4
1S-EBC 17	7.0	5.8	5.5	6.1
PST-4TZ	7.3	0.9	4.8	6.1
CASCADE	9.9	0.9	5.4	6.0
SR 5130 (SRX 51G)	5.9	7.2	4.6	5.9
LONGFELLOW II	8.9	5.3	5.6	5.9
DP 77-9886	7.5	5.2	4.8	5.8
MUSICA	6.2	5,8	5.5	5.7
J-5 (JAMESTOWN 5)	0.9	5.7	5.4	5.7
AMBASSADOR	6.2	6.3	4.4	5,6
CULUMBRA II (ACF 174)	9.9	5.2	5.1	9.6
COMPASS (ACF 188)	6.4	4.5	5.5	5.4
7 SEAS	6.3	5.5	4.4	5.3
LSD VALUE	1.5	1.6	1.2	0.8
C.V. (%)	13.7	17.5	14.2	15.2

TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05). 7

C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN. 21

TABLE 7. WINTER COLOR RATINGS OF FINELEAF FESCUE CULTIVARS 1/2004 DATA

WINTER COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

NAME	KY	VA1	MEAN	
IS-FRR 23	5.0	6,3	5.7	
SRX 55R	5.0	6.3	5.7	
IS-FRR 29	5.3	5.7	5,5	
PATHFINDER	5.0	6.0	5.5	
ORACLE	4.3	5.7	5.0	
SEABREEZE	4.7	5.0	4.8	
SHADEMASTER	4.7	5.0	4.8	
BOREAL	4.0	5.3	4.7	
DAWSON E	4.0	5.0	4.5	
LSD VALUE	4.2	1,4	6.0	
C.V. (%)	12.1	13.0	12.6	

TABLE 18B. WINTER COLOR RATINGS OF CHEWINGS FESCUE CULTIVARS 1/ 2004 DATA

WINTER COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

VA1 MEAN	7.3 7.5 7.0 7.3 7.3 7.3 7.0 7.2 6.3 7.2 6.3 7.0 7.0 6.8 6.3 6.8 6.3 6.3 6.3 6.3 6.3 6.3	1.5 0.9 13.6 11.9
KY1	7.7.7.3.3.3.3.3.4.0.0.0.0.0.0.0.0.0.0.0.0.0.0	1.2
NAME	CULUMBRA II (ACF 174) ** IS-FRC 17 COMPASS (ACF 188) 7 SEAS DP 77-9886 LONGFELLOW II SRX 516 PST-4TZ ZODIAC (BUR 4601) AMBASSADOR CASCADE J-5 (JAMESTOWN 5) DP 77-9886	LSD VALUE C.V. (%)

TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05). 7

G.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN. 5/

TABLE \mathcal{S} , LEAF SPOT RATINGS OF FINELEAF FESCUE CULTIVARS 1/ 2004 DATA

70
DISEASE
ONED
٠,
 RATINGS
SPOT
LEAF

-9; 9≔NO DISEASE 2/	ME1 NJ2 MEAN	8.0 3.7 5.8	6.0 5.3 5.7			7.0 3.7 5.3	7.3 3.0 5.2	6.0 3.0 4.5	3.7 5.3 4.5	5.3 1.3 3.3	2.0 1.3 1.2	16.9 14.5 16.3
LEAF SPOT RATINGS 1-9; 9=NO DISEASE	NAME	QUATRO	SEABREEZE	DP 77-9886	SCALDIS	C03-4676	ORACLE	BOREAL	DAWSON E	SHADEMASTER	LSD VALUE	C.V. (%)

TABLE 20B. LEAF SPOT RATINGS OF CHEWINGS FESCUE CULTIVARS 1/ 2004 DATA

LEAF SPOT RATINGS 1-9; 9=NO DISEASE 2/

NJ2 MEAN	7.0 7.7	7.3 7.5	6.7 7.3	6.3 7.0	0.7 0.9		6.3 6.7	6.0 6.5	4.7 6.3	5.7 6.3	4.7 6.0	3.8 5.5	7		15.1 14.0
ME1	80 c	7.7	8.0	7.7	8.0	7.0	7.0	7.0	8.0	7.0	7.3	7.3		-	13.0
NAME	DP 77-9885	SRX 516	LONGFELLOW II	AMBASSADOR	ZODIAC (BUR 4601)	CULUMBRA II (ACF 174)	PST-4TZ	7 SEAS	CASCADE	J-5 (JAMESTOWN 5)	COMPASS (ACF 188)	DP 77-9886	I SD VALUE	1	C.V. (%)

TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05). 7

C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

DOLLAR SPOT RATINGS OF FINELEAF FESCUE CULTIVARS 1/ 2005 DATA

TABLE 9

2/
DISEASE
0N=6
1-9;
RATINGS
SPOT
DOLLAR

MA1 PA1 MEAN	5.7	6.7	5.7	5.0	5.0	0.9	5.3 4.3 4.8	3.3	6.4	5.0	 2.2 1.3 1.3	11.3
NAME	IS-FAR 23	CELESTIAL	SRX 55R	ORACLE	AUDUBON	C03-4676	SHADEMASTER	DAWSON E	JASPER II	RAZOR	LSD VALUE	C.V. (%)

TABLE 22B. DOLLAR SPOT RATINGS OF CHEWINGS FESCUE CULTIVARS 1/ 2005 DATA

DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE 2/

	· •	ì	ì	
NAME	MA1	PA1	MEAN	
AMBASSADOR	8.7	8.3	8.5	
LONGFELLOW II	0.6	7.7	8.3	
PST-4TZ	8.7	8.0	в. Э	
SR 5130 (SRX 51G)	8.7	8.0	8.3	
ZODIAC (BUR 4601)	8.0	8.7	8.3	
DP 77-9885	8.3	7.3	7.8	
CASCADE	7.7	7.3	7.5	
IS-FRC 17	7.7	7.3	7.5	
7 SEAS	7.7	7.0	7.3	
COMPASS (ACF 188)	6.7	8.0	7.3	
J-5 (JAMESTOWN 5)	6.7	7.7	7.2	
CULUMBRA II (ACF 174)	7.3	6.0	6.7	
DP 77-9886	6.0	7.3	6.7	
MUSICA	5.7	7.3	6.5	
LSD VALUE	2.1	1.4	6,1	
C.V. (%)	17.4	11.2	14.6	

^{1/} TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

^{2/} C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

RED THREAD RATINGS OF FINELEAF FESCUE CULTIVARS 1/ 2004 DATA TABLE 10

2 RED THREAD RATINGS 1-9; 9=NO DISEASE

NAME	WE1	PA1	WA3	WIT	MEAN	
CELESTIAL	8.7	9	4	4.7	5.9	
ORACLE	7.0	4.7	4.7	7.3	5.0	
ASC 245	7.7	6.3	4.3	5.3	5.0	
AUDUBON	8.0	5.7	3.7	5.7	5.8	
C-SMX	6.7	5.3	4.7	6.3	5.8	
RAZOR	7.3	4.3	5.0	6.0	5.7	
SHADEMASTER	7.0	6.3	3.3	5.7	5,6	
C03-4676	8.0	5.7	3.7	4.3	5.4	
BOREAL	6.3	5.0	3.0	6.0	5,1	
LSD VALUE	1.3	1.6	1.8	4.	0.8	
C.V. (%)	10.3	13.8	22.4	10.9	13.6	

RED THREAD RATINGS OF CHEWINGS FESCUE CULTIVARS 1/ 2004 DATA TABLE 22B.

RED THREAD RATINGS 1-9; 9=NO DISEASE

NAME	ME	PA1	WA3	WI 1	MEAN
COMPASS (ACF 188)	8,3	8.0	5.7	0.6	7,8
DP 77-9886	0.6	7.7	5.3	0.6	7.8
AMBASSADOR	0.6	6.7	6.0	0.6	7.7
LONGFELLOW II	8.3	8.0	5.0	9.0	7.6
ZODIAC (BUR 4601)	8.7	7.7	5.0	0.6	7.6
7 SEAS	8.3	7.7	5.0	9.0	7.5
CASCADE	8.7	7.3	5.0	9.0	7.5
PST-4TZ	8.3	7.7	5.0	0.6	7.5
DP 77-9885	8.3	7.0	5.3	9.0	7.4
J-5 (JAMESTOWN 5)	8.0	7.3	4.7	0.6	7.3
SRX 51G	8.0	7.0	5.0	0.6	7.3
CULUMBRA II (ACF 174)	7.3	6.7	5.3	9.0	7.1
IS-FRC 17	7.7	6.3	4.7	8.7	6.8
LSD VALUE	1.5	1.7	1.7	0.3	0.7
C.V. (%)	11.1	14.7	20.8	1.8	12.0

TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05). 7

C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN. 2/

TABLE # RED THREAD RATINGS OF FINELEAF FESCUE CULTIVARS 1/2005 DATA

	RED THREAD RATINGS 1-9; 9=NO DISEASE 2/	RATINGS	1-9; 9=N0	DISEASE	2/	
NAME		MA1	MD1	ME1	WA3	MEAN
AUDUBON		6.7	3.7	7.7	4.3	5.6
BOREAL		7.7	3.3	7.7	3.3	5,5
IS-FRR 23		6.7	3.3	8.7	3.3	5.5
ORACLE		6.7	2.7	8.3	3,3	5,3
OP 77-9886		8.0	3.7	6.0	3.3	5.3
DAWSON E		7.7	3.7	5.7	3,7	5,2
CASCADE		7.3	3.3	6.0	3.7	5.1
JASPER II		6.3	3,3	7.3	8	5,1
SHADEMASTER		5.7	5.0	5.3	3.7	9
003-4676		7.3	3.0	5.7	3.3	4.8
LSD VALUE		9.	1.5	9.	1,2	0.8
C.V. (%)		12.9	16.9	15.8	17.1	15.6

TABLE 23B. RED THREAD RATINGS OF CHEWINGS FESCUE CULTIVARS 1/2005 DATA

2/
DISEASE
0N=6
1-9;
RATINGS
THREAD
ÆD

	RED THREAD RAILNGS 1-9; 9=NO DISEASE	HALINGS	1-9; 9≃N0	DISEASE	2/	
	NAME	MA1	MD1	ME1	WA3	MEAN
	PST-4TZ	8.7	6.0	8,7	4 ق	6.9
	SR 5130 (SRX 51G)	8.7	5,3	8.0	4.3	9,9
	ZODIAC (BUR 4601)	8.7	5.0	0.6	3.7	6.6
	AMBASSADOR	ε 3	5.0	8.7	4.0	6.5
7	MUSICA	0.6	4.7	7.3	5.0	6.5
۲'	IS-FRC 17	8.7	4.0	8.7	3.7	6.3
	COMPASS (ACF 188)	8.0	4.7	7.7	4.0	6.1
	DP 77-9885	7.7	4 .3	8.3	4 0	6.1
	J-5 (JAMESTOWN 5)	7.7	4.7	7.3	4.3	0.9
	LONGFELLOW II	7.0	4.7	8.0	4.3	0.9
	7 SEAS	8.3	4.0	7.3	3.7	5.8
	CULUMBRA II (ACF 174)	8.0	4.0	7.3	4.0	5.8
	DP 77-9886	8.0	3.7	6.0	3,3	5.3
	CASCADE	7.3	3.3	0.9	3.7	5.1
	LSD VALUE	£.3	1,5		5.	8.0
	C.V. (%)	9.8	20.2	16.9	23.0	16.5

TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN. 2/

TABLE 12 MELTING-OUT (SPRING) RATINGS OF FINELEAF FESCUE CULTIVARS 1
2004 DATA

MELTING-OUT RATINGS 1-9; 9=NO DISEASE 2/

SD1	REL) 5.0 4.7	. 4 4 . 6 6	4.3 E.4	4.3	3.7	3.7	e . e	1.1	11.8
NAME	RELIANT IV (A01630REL) BERKSHIRE	OXFORD PICK HF #2	F 0	SPM	SCALDIS	SRX 3K	SR 3000	LSD VALUE	C.V. (%)

TABLE 19B. MELTING-OUT (SPRING) RATINGS OF CHEWINGS FESCUE CULTIVARS 1/ 2004 DATA

MELTING-OUT RATINGS 1-9; 9=NO DISEASE 2/

SD1	6.77 7.00 7.00 7.00 7.00 6.00 6.00	1.3
NAME	ZODIAC (BUR 4601) 7 SEAS AMBASSADOR PST-4TZ SRX 516 CULUMBRA II (ACF 174) DP 77-9886 LONGFELLOW II ** IS-FRC_1Z CASCADE DP 77-9885 DP 77-9885	COMPASS (ACF 188) LSD VALUE C.V. (%)

TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05). _

C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN. 2/

DROUGHT TOLEHANCE (DORMANCY) RATINGS OF FINELEAF FESCUE CULTIVARS 1/ 2005 DATA TABLE 13

DROUGHT TOLERANCE (DORMANCY) RATINGS 1.9; 9=NO DORMANCY 2/

RI1	4 4 6 8 8 8 4 4 6 6 8 6 6 6 6 6 6 6 6 6	1.8
	(ACF 174) 3F 188) (OWN 5)	
NAME	MUSICA PATHTINDER CULUMBRA II (ACF CASCADE COMPASS (ACF 188) DP 77-9885 AMBASSADOR DP 77-9886 U-5 (JAMESTOWN 5)	LSD VALUE C.V. (%)

DROUGHT TOLERANCE (DORMANCY) RATINGS OF CHEWINGS FESCUE CULTIVARS 1/ 2005 DATA

TABLE 20B.

DROUGHT TOLERANCE (DORMANCY) RATINGS 1-9; 9=NO DORMANCY 2/

NAME	RIT
SR 5130 (SRX 51G)	5.3
7 SEAS	5.0
X IS-FRC 1Z	5.0
LONGFELLOW II	4.7
ZODIAC (BUR 4601)	6.4
MUSICA	4.0
CULUMBRA II (ACF 174)	3.7
CASCADE	3.0
COMPASS (ACF 188)	3.0
DP 77-9885	3.0
AMBASSADOR	2.0
DP 77-9886	2.0
J-5 (JAMESTOWN 5)	2.0
PST-4TZ	2.0
	(
LSD VALUE	2,3
C.V. (%)	40.6

TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

G.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN. 2/

REPRODUCE LOCALLY. Include form number and edition date on a	Il reproductions.	FORM APPROVED - OMB No. 0581-005
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE EXHIBIT E STATEMENT OF THE BASIS OF OM/MEDSHIP	Application is required in order to do certificate is to be issued (7 U.S.C. confidential until the certificate is issued.	2421). The information is held
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
#:3/4/2008) DLF International Seeds and Rutgers, the State University of New Jersey	IS-FRC 17	LaCrosse
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
PO Box 229/175 West H Street	(541) 369-2251	(541) 929-4087
Halsey, OR 97348 USA	7. PVPO NUMBER #2 0	0800080
8. Does the applicant own all rights to the variety? Mark an "X" in the	ne appropriate block. If no, please exp	lain. YES NO
9. Is the applicant (individual or company) a U.S. national or a U.S.	based company? If no, give name of	country. YES NO
10. Is the applicant the original owner? YES	NO If no, please answer on	ė of the following:
a. If the original rights to variety were owned by individual(s), is YES	(are) the original owner(s) a U.S. Nation NO If no, give name of cour	
b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. b NO If no, give name of coun	
11. Additional explanation on ownership (Trace ownership from original contents of the content	inal breeder to current owner. Use the	reverse for extra space if needed):
PLEASE NOTE:	·	
Plant variety protection can only be afforded to the owners (not licen	sees) who meet the following criteria:	
If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals of a country which affords similar protection.		
If the rights to the variety are owned by the company which emplo nationals of a UPOV member country, or owned by nationals of a genus and species.		
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must	meet one of the above criteria.
The original breeder/owner may be the individual or company who dinact for definitions.	irected the final breeding. See Section	41(a)(2) of the Plant Variety Protection

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is ostimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provide and employer.

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Form Approved OMB NO 0581-0055

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> U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

EXHIBIT F DECLARATION REGARDING DEPOSIT

NAME OF OWNER (S) ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) TEMPORARY OR EXPERIMENTAL DESIGNATION DLF International Seeds and Rutgers, PO Box 229/175 West H
the State University of New Jersey Halsey, OR 97348, USA IS-FRC 17 PO Box 229/175 West H Street VARIETY NAME (BT:3/11/2008) LaCrosse NAME OF OWNER REPRESENTATIVE (S) ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) FOR OFFICIAL USE ONLY Stephen W. Johnson PO Box 229/175 West H Street Halsey, OR 97348, USA

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

ephen W Johnson

Date 22, 2008